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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
REDDY, KARUNA P	
ART UNIT	**PAPER NUMBER**
1713	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/579,869	HOECKER, BERND	
	Examiner	Art Unit	
	Karuna P. Reddy	1713	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-16 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-16 is/are rejected.

7)☒ Claim(s) 16 is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☒ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 5/18/2006.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. It is noted that applicant did not provide an English translation of the foreign priority application (Germany 103 54 334.1).
2. Preliminary amendment filed on May 18, 2006 is made of record. Claims 1-16 are pending in the application.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a

nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1-16 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1- 12 and 16-19 of copending Application No. 10/579,863. Although the conflicting claims are not identical, they are not patentably distinct from each other because they are both drawn to a decorative material comprising cycloolefin oligomer. The term "comprising" recited in instant application is "open ended" and the decorative material can therefore be obtained by removing the dye, and properties associated with it, from the decorative material of copending application.

This is a provisional obviousness-type double patenting rejection.

Claim Objections

5. Claim 15 is objected to because of the following informality: Claim 15 recites ".... **and/or** ...." and should read ".... **or**...". Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claim 16 provides for the use of ".... decoration material ....", but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

8. Claim 16 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd.* v. *Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Claim Rejections - 35 USC § 102/103

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

11. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

12. Claims 1-12 and 15-16 rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Jacobs et al (US 5, 464, 585).

Jacobs et al disclose cycloolefin copolymer made by polymerization of 0.1-99.9 wt% of at least one polycyclic olefin and 0.1 to 99.9 wt% of monomers of at least one acycylic 1-olefin (abstract). The index of refraction of the reaction products, determined using an Abbe refractometer and mixed light, is in the range from 1.520 to 1.555 (column 25, lines 51-53). Particularly preferred polycyclic olefins are norbornene and tetracyclododecene. They are preferably copolymerized with ethylene. Very particular preference is given to ethylene-norbornene and ethylene-tetracyclododecene copolymers (column 24, lines 1-5).

The cycloolefin copolymers prepared have a mass average molar mass (M_w) of from 1,000 to 10,000,000 (column 24, lines 59-61). The low end of M_w reads on the entanglement molecular weight and molar mass of claims 4-5. Since the index of refraction is very close to crown glass, the products can be employed as a substitute for glass in various applications (column 25, lines 54-56) including lenses, prisms, support plates (column 25, line 57), injection molded parts (column 25, line 67). The cycloolefin polymers have viscosity numbers of from 10 to 1000 ml/g (column 24, line 65-66).

The prior art of Jacobs et al is silent with respect to Abbe number, average chain length, density, haze, clarity and luster of the decorative material.

However, in light of the fact that prior art teaches / discloses essentially the same material as that of the claimed, one of ordinary skill in the art would have a reasonable basis to believe that the cycloolefin copolymer of low molecular weight of prior art exhibits essentially the same property(ies). Since PTO cannot conduct experiments, the burden of proof is shifted to the applicants to establish an unobviousness difference. See In re Fitzgerald, 619 F.2d 67, 205 USPQ 594 (CCPA 1980).

Even if properties of the decorative material of instant claims and prior art examples are not the same, it would still have been obvious to one of ordinary skill in the art to make decorative material having the claimed properties because it appears that the references generically embrace the claimed material and person of ordinary skill in the art would have expected all embodiments of the

reference to work. Applicants have not demonstrated that the differences, if any, between the claimed decorative material and the material of prior art give rise to unexpected results.

Abbe number[1] of 50 to 60 is a function of refractive index of material and overlaps with that of the instant claim 1.

Average chain length of claim 6 is a function of molecular weight and molecular weight of copolymer on the low end overlaps with that of the instant invention.

The decorative material comprising a mixture of two different densities in claim 15 and the use of decorative material as filler material or display material in claim 16 is within the scope of a skilled artisan and would have been obvious.

Claim Rejections - 35 USC § 103

13. Claims 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jacobs et al in view of Elliott (US 4, 292, 016).

The discussion with respect to Jacobs et al in paragraph 11 is incorporated herein by reference.

The prior art of Jacobs et al is silent with respect to the process of molding the cycloolefin oligomer to obtain the decorative material.

[1] Abbe number is defined as $(n_D-1)/(n_F-n_C)$, where n_D, n_F and n_C are refractive indices of material at the wavelengths of Fraunhofer D-, F- and C- spectral lines (589.2, 486.1 nm and 656.3 nm respectively).

However, Elliott teaches a process for solidifying molten material by pouring onto a substrate and cooling in which undesired crystallinity is avoided by first forming a solidified protective stabilizing skin on the melt surface by carefully controlled air cooling (abstract). The preferred substrate for pouring or casting molten material is an endless belt of stainless steel known as "Sandvik belt". This belt provides good heat exchange from the molten material as it is undergoing cooling through the metal belt which is sprayed by water jets (column 2, lines 48-54). Therefore, it would have been obvious to one skilled in the art at the time invention was made to prepare a mold of cycololefin oligomer of Jacobs et al by pouring the molten mixture of cylcoolefin oligomer and dye on to a Sandvik belt and cast it into a mold while cooling to avoid undesired crystallinity.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karuna P. Reddy whose telephone number is (571) 272-6566.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public

PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Karuna P Reddy
Examiner
Art Unit 1713

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